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(54) ORGANIC ELECTROLUMINESCENCE ELEMENT

(57) Abstract:

PURPOSE: To attain continuous emission with high brightness by providing an electron injection layer, containing at least one of alkali earth oxide, between a luminous layer and a cathode.

CONSTITUTION: An organic EL element comprises a glass substrate 6, anode 2, hole transport layer 4 and a luminous layer 3 formed of organic compound, electron injection layer 10 and lamination of a metal cathode 1. The electron injection layer 10, containing oxide of alkali earth metal, Be, Mg, Ca, Sr, Ba, Ra, is used particularly as SrO, CaO, BaO and (Sr, Ca, Ba) O. This thin film is transparent, and since its work is

very small, the element can emit light with high brightness by optimizing a film thickness. Ability to transport an electron is provided in the luminous layer 3 further with emission ability. For instance, 8-hitoxinequinoline aluminum complex or the like is used.

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